

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application:

1. (Currently Amended) A data structure tangibly embodied in a computer-readable storage medium, the data structure preventing access, in a computer system, to a data object stored in a first storage location, the data structure comprising:

a first lock object, in which an ID of the data object is stored by a first process moving the data object from the first storage location to a second storage location, thereby indicating that the data object is being accessed, and in which a link to ~~[[a]]~~ the second storage location storing a copy of the data object is assigned to the ID, the first lock object comprising a table with at least two columns, a first column for storing IDs of data objects and a second column for storing links to copies of the data objects in the second storage location; and

a second lock object, in which the ID is stored by the first process performing an action on the data object before storing the ID in the first lock object or before assigning the second storage location to the ID in the first lock object, the second lock object comprising a one-dimensional data array of IDs of data objects, wherein:

the first process deletes the ID ~~is deleted~~ from the second lock object after storing the ID in the first lock object or after assigning the second storage location to the ID in the first lock object, and wherein

~~the first lock object and the second lock object are accessible by a software application, whereby the software application~~ a second process is prevented from accessing the data object if the ID is stored in the first lock object or the second lock object by the first process.

2. (Previously Presented) The data structure of claim 1, wherein the link is a filename or a link to a file.

3. (Previously Presented) The data structure of claim 1, wherein the first lock object is a file stored in a nonvolatile storage means.

4. (Canceled).

5. (Previously Presented) The data structure of claim 1, wherein the data object comprises one or more fields of one or more tables and wherein the ID comprises one or more key fields of the one or more tables.

6. (Currently Amended) The data structure of claim 1, wherein ~~the first lock object and the second~~ process is ~~lock object are created by a data moving process or a data archiving process.~~

7. (Previously Presented) The data structure of claim 1, wherein the second lock object is stored in a volatile or nonvolatile storage means.

8-9. (Canceled).

10. (Previously Presented) The data structure of claim 1 for use in enterprise resource planning software.

11. (Currently Amended) A computer system for processing data and preventing access to a data object stored in a first storage location, the computer system comprising:

memory means having program instructions;

input means for entering data;

storage means for storing data;

a processor responsive to the program instructions; and

a data structure comprising:

a first lock object, in which an ID of the data object is stored by a first process moving the data object from the first storage location to a second storage location, ~~thereby indicating that the data object is being accessed,~~ and in which a link to ~~[[a]]~~ the second storage location storing a copy of the data object is assigned to the ID, the first lock object comprising a table with at least two columns, a first column for storing IDs of

data objects and a second column for storing links to copies of the data objects in the second storage location; and

a second lock object, in which the ID is stored by the first process performing an action on the data object before storing the ID in the first lock object or before assigning the second storage location to the ID in the first lock object, the second lock object comprising a one-dimensional data array of IDs of data objects, wherein:

~~the ID is stored in the second lock object before storing the ID in the first lock object or before assigning the second storage location to the ID in the first lock object, wherein~~

the first process deletes the ID ~~is deleted~~ from the second lock object after storing the ID in the first lock object or after assigning the second storage location to the ID in the first lock object, and ~~wherein~~

~~the first lock object and the second lock object are accessible by a software application, whereby the software application~~ a second process is prevented from accessing the data object if the ID is stored in the first lock object or the second lock object by the first process.

12. (Currently Amended) A computer readable medium storing executable instructions which, when executed, create a data structure for preventing access, in a computer system, to a data object stored in a first storage location, the data structure comprising:

a first lock object, in which an ID of the data object is stored by a first process moving the data object from the first storage location to a second storage location, ~~thereby indicating that the data object is being accessed~~, and in which a link to ~~[[a]]~~ the second storage location storing a copy of the data object is assigned to the ID, the first lock object comprising a table with at least two columns, a first column for storing IDs of data objects and a second column for storing links to copies of the data objects in the second storage location; and

a second lock object, in which the ID is stored by the first process performing a action on the data object before storing the ID in the first lock object or before assigning the second storage location to the ID in the first lock object, the second lock object comprising a one-dimensional data array of IDs of data objects, wherein:

~~the ID is stored in the second lock object before storing the ID in the first lock object or before assigning the second storage location to the ID in the first lock object,~~ wherein

the first process deletes ~~the ID is deleted~~ from the second lock object after storing the ID in the first lock object or after assigning the second storage location to the ID in the first lock object, and wherein

~~the first lock object and the second lock object are accessible by a software application, whereby the software application~~ a second process is prevented from accessing the data object if the ID is stored in the first lock object or the second lock object by the first process.

13. (Canceled).

14. (Previously Presented) The data structure of claims 11 or 12, wherein the link is a filename or a link to a file.

15. (Previously Presented) The data structure of claims 11 or 12, wherein the first lock object is a file stored on a nonvolatile storage means.

16. (Canceled).

17. (Previously Presented) The data structure of claims 11 or 12, wherein the data object comprises one or more fields of one or more tables and wherein the ID comprises one or more key fields of the one or more tables.

18. (Currently Amended) The data structure of claims 11 or 12, wherein the ~~first lock object and the second~~ process is lock object ~~are created by a data moving process or a data archiving process.~~

19. (Previously Presented) The data structure of claims 11 or 12, wherein the second lock object is stored in a volatile or nonvolatile storage means.

20-21. (Canceled).